

Title (en)
METAL SHEET FORMING PROCESS WITH HYDRAULIC COUNTERPRESSURE

Publication
EP 0092253 B1 19870812 (EN)

Application
EP 83103876 A 19830420

Priority
• JP 4752683 A 19830322
• JP 6611882 A 19820420

Abstract (en)
[origin: EP0092253A2] A punch is pressed on a blankpiece into a die. The die is filled with liquid therein, whereby hydraulic counterpressure is generated by said pressing. The pressed blankpiece is forcibly followed in shape around the punch by hydraulic counterpressure, while part of the hydraulic counterpressure is automatically supplied to an outer circumference of the blankpiece via bypath passage. In case, the blankpiece is a plate, said supplied hydraulic pressure serves as compression force from the outer circumference of the flange to the radius direction. In case, the blankpiece is a product formed by a first drawing, said pressure serves as pressing force toward axial direction of a side wall of the product. When the supplied hydraulic pressure flows out from a space between the punch and a blank holder, the liquid serves as lubrication on an upper and lower surfaces of the blankpiece.

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B21D 22/20

IPC 8 full level
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CPC (source: EP)
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Cited by
CN103191971A; CN1035863C; DE19842750B4; EP0549955A1; US10315242B2; US10239648B2

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